
OFFICE OF THE INDEPENDENT BUDGET ANALYST REPORT

Date Issued: September 10, 2010

IBA Report Number: 10-71

City Council Meeting Date: September 13, 2010

Item Number: 150

Adoption of a Home Energy Retrofit Policy Resolution

OVERVIEW

On September 13, 2010, Item 150, “Adoption of a Home Energy Retrofit Policy Resolution,” will be presented to City Council for consideration. Council will be asked to adopt a resolution which will establish policy goals for home energy retrofit programs within the City.

At the May 12, 2010 Natural Resources and Culture Committee (NR&C) meeting, the Environmental Health Coalition (EHC) presented a draft resolution for a home energy retrofit policy. NR&C forwarded the item to the full Council with requests for additional work. One of the items requested was that the IBA explore other cities’ endeavors related to home energy retrofits, as well as applicable state and federal policies. This report addresses that request.

The resolution presented to Council for the September 13, 2010 meeting is a modified version of the draft sent to NR&C. Some of the changes to the resolution include the following:

- Removal of the clause that the City and other agencies and utilities take advantage of outside resources, such as community-based organizations, for outreach efforts in hard-to-reach communities;
- Modification of the clause encouraging the hiring of certain workers – from the identification of workers “residing in economically distressed communities” to those “residing in communities with below-average incomes or high unemployment”;

- Modification of the clause that home retrofit programs should maximize energy savings – from including a goal of achieving 20% energy savings per home to targeting properties that can benefit the most from energy retrofits.

If Council adopts the policy as presented, the following resolutions will be made:

- The City Council encourages the City to adopt a long-term citywide energy reduction plan.
- The City, utilities and other entities providing residential programs/incentives to increase energy efficiency should:
 - include significant outreach on reducing electricity and gas consumption;
 - emphasize equity in incentives for low and low/moderate income homes;
 - encourage hiring qualified workers residing in communities with below-average incomes or high unemployment, as well as workers from local training centers.
- Pre- and post-audits and assessments will be required to verify energy savings.
- Contractors and workers performing retrofit installations should have training in accordance with industry-wide standards.
- Properties that can benefit most from energy retrofits should be targeted to maximize energy savings – for example homes built before adoption of the 1978 California Energy Code.

The resolution presented to Council is relatively general in nature as compared with some energy retrofit policies of other local governments. Accordingly, the information in this report is presented to highlight some of the issues Council may wish to consider with regard to the adoption of a home energy retrofit policy.

Additionally, the policy goals in this resolution are not presented as a formal Council Policy, because this resolution is more broad-based, reaching other entities and agencies in addition to the City. Within the City, staff can use this resolution to tailor programs or projects brought forward to City Council. It is unclear at this time how this resolution will be effectively implemented outside the City.

The information in the remainder of this report provides an overview of a very complex field. Additionally, the home energy retrofit programs industry is new and evolving. The “Policy Analysis” section of this report presents the following topics:

- Background information on energy retrofit programs, including federal actions, program goals and program benefits
- Examples of energy retrofit programs
- Implementation issues – matters to consider regarding energy retrofit programs, including financing mechanisms

- The City of San Diego's energy retrofit program funded with Energy Efficiency and Conservation Block Grant (EECBG) monies
- Potential limiting factors for the City of San Diego when considering the requirements of energy retrofit programs in other localities

POLICY DISCUSSION

Energy Retrofit Programs – Background Information

The Council on Environmental Quality (CEQ) is established within the Executive Office of the President and coordinates Federal environmental efforts. In 2009 CEQ was charged with “developing a proposal for Federal action that will grow green job opportunities and boost energy savings by retrofitting homes for energy efficiency.”

In October 2009 CEQ's report, entitled “Recovery Through Retrofit,” was released. Specific Federal actions are recommended that deal with market and non-market barriers to the home retrofit market. The barriers to the retrofit market cited in the report include 1) a lack of reliable information for consumers, including a lack of a standard energy performance rating tool, 2) the upfront costs of home retrofit projects and a lack of financing options, 3) the lack of well-trained, skilled workers.

Also within the “Recovery Through Retrofit” report are specific Federal actions related to facilitating “consistent, high-quality training of a green retrofit workforce.”

- Advancing a nationally recognized worker certification standard
- Promoting a nationally recognized training accreditation standard
- Developing and deploying model training programs for workers
- Leveraging existing workplace training
- Providing business development support and business skills training to improve the rate of success for small efficiency retrofit businesses

While the federal government has worked on policy goals for energy retrofit programs, local governments have also been establishing their own policies. Below are some goals for local government policies which are outlined within the educational paper entitled, “A Short Guide to Setting Up a City-Scale Retrofit Program,” which was published by Green For All and the Center on Wisconsin Strategy (COWS)¹:

- To mandate or incent retrofits

¹ “A Short Guide to Setting Up a City-Scale Retrofit Program” was prepared by the Center on Wisconsin Strategy (COWS) – a national policy center for economic development which includes environmental sustainability and shared prosperity – in collaboration with Green For All. Green For All is a national organization which collaborates with government, business, labor and communities, working to create programs which increase green industry jobs and opportunities. Green For All's website has links to numerous reports and links to green jobs policies around the country.

- To facilitate the financing of retrofits
- To influence job quality (i.e. prevailing or living wage)
- To mandate hiring requirements for targeted groups

Inherent goals of energy retrofit programs are related to sustainability: to conserve energy and achieve related monetary savings, as well as reduce greenhouse gas emissions. An energy policy that affects the City of San Diego is the California Global Warming Solutions Act of 2006, or Assembly Bill 32, which mandates that State greenhouse gas emissions be reduced to the 1990 level by 2020. Examples of retrofits designed to reduce energy consumption include air sealing; HVAC testing, repairs or replacements; lighting and appliance repairs or replacements; and insulation installations.

Energy retrofit policies can also have standards for targeting hiring from disadvantaged communities, creating jobs for “people facing barriers to employment,” and mandating prevailing wage jobs.

Benefits to home energy retrofit programs cited by Green for All and COWS include the following:

- Savings to families
- Environmental benefits of reduced energy usage and greenhouse gas emissions
- Means to create jobs and stimulate local economies

Energy retrofit programs can be used as a way to create entry-level jobs with career potential, and a way to target low-income communities for both retrofits and eligible workers. Additionally, requiring participation rates for hiring of local residents can help keep money in the local economy by producing local home service jobs, increasing the local tax base, and indirectly supporting other jobs.

Energy Retrofit Program Examples

An example of a federal retrofit program is The Home Performance with ENERGY STAR (HPwES), from the U.S. Environmental Protection Agency (EPA) and U.S. Department of Energy (DOE). Local program sponsors, such as state agencies, municipalities or utilities, partner with the DOE and EPA and are responsible for implementing and running their own programs.

HPwES is a “whole-home” approach for energy efficiency. Specially-trained contractors comprehensively evaluate homes and recommend improvements. Rebates and financing options can be available as part of the programs and vary for each local sponsor.

Recently, a number of local jurisdictions have established comprehensive energy retrofit programs. Examples of such programs are listed below, which include the City of

Portland, the State of New York, and the City of Seattle. The goals of these energy retrofit programs include reducing energy consumption, lowering greenhouse gas emissions, saving money on energy bills, and creating jobs.

The program components presented below include some of the financing elements, as well as certain policy goals discussed above. As such, this information is not a comprehensive presentation of components for these programs.

Clean Energy Works Portland

Portland, Oregon has a pilot program in place for owner-occupied homes, which commenced in June 2009. The program is anticipated to become more widely available in the first quarter of 2011.

The homeowner will not incur upfront costs for retrofits. Financing of retrofits is in the form of long-term, low-interest loans paid back via utility bills (or “on-bill financing”). The utility companies are not owned by the City. A revolving loan fund has been established with \$1.1 million from EECBG/ARRA funding; \$1.4 million from other city resources; \$2 million from private foundation debt, financed by the fund manager (which manages the revolving loan fund); and \$3.5 million from the City’s economic development agency – funds must be dedicated to urban renewal areas.

Contracting preference is given to businesses owned by disadvantaged or underrepresented persons; and targeted groups for program jobs also include disadvantaged or underrepresented persons. Additionally, wage minimums are part of the program standards.

An “Energy Advocate,” who is a personal representative assigned to each recipient, will be available to explain retrofit recommendations and financing alternatives and to help the homeowner during the installation process.

Green Jobs – Green New York Act of 2009

The State of New York has created an energy retrofit initiative, tied to workforce development, for single-family and multi-family homes, small businesses and non-profits. The program is anticipated to be launched in October 2010. New York currently has retrofit programs in place with low-interest financing which have not included workforce development elements.

The homeowner will not incur upfront costs for retrofits. A State revolving loan fund has been established, which can finance eligible projects. According to a representative of the program, the revolving loan fund has been allocated approximately \$50 million from regional cap and trade proceeds. The financing of retrofits can be in the form low-interest loans paid back via utility bills. Most utilities are investor-owned.

Currently, the program has no contracting or hiring preferences for targeted groups, for example minority and women-owned businesses. These issues are still under consideration, according to the program representative.

Community Power Works (Seattle)

The City of Seattle is developing energy retrofit program implementation models for single-family and multi-family homes, as well as models for the categories of small business, large commercial, hospitals, and municipal buildings. The retrofit process is anticipated to begin after the models are fully developed, starting with the first group, hospitals, in February of 2011.

The plan is to utilize \$20 million in federal EECBG stimulus dollars to subsidize home energy performance audits and finance retrofit work through a revolving loan fund program. Low-interest loans for the retrofits will be paid back via utility bills. The utilities involved are Seattle Public Utilities and Seattle City Light, which are both owned by the City.

A resolution was adopted in July 2010 endorsing the “Community High-Road Agreement for Seattle's Residential Retrofit Programs.” For residential retrofits, contracting preference is given to small businesses, minority and women-owned businesses, local businesses, and veteran-owned and employee-owned businesses. Criteria for hiring of targeted workers (low-income individuals, veterans and individuals with “barriers to employment”) are part of the program standards. Base pay rates and prevailing wages are also included in the program requirements.

For the City of Seattle, a stakeholder group was an effective resource for policy development. Additionally, a new stakeholder committee will deliberate over details regarding implementation of standards for training and monitoring of contractors.

Energy Retrofit Programs – Implementation Issues

Creating energy retrofit programs and policies can be an intensive and detailed process. There are several organizations which focus on the establishment of energy retrofit programs. The Efficiency Cities Network (ECN)² is an informal policy learning network for members who are endeavoring to create municipal-scale energy retrofit programs. The ECN provides access to shared information and experiences, webinars and other

² ECN is hosted by the Center on Wisconsin Strategy (COWS) – a national policy center for economic development which includes environmental sustainability and shared prosperity – in collaboration with Green For All. Green For All is a national organization which collaborates with government, business, labor and communities, working to create programs which increase green industry jobs and opportunities.

resources. Intended beneficiaries of this network include government staff, non-profits, researchers and technical assistance providers.

The California Climate Action Network (CCAN)³ is another resource organization from which there are information sharing opportunities, best practices, white papers and other information. Through CCAN's "Beacon Award" series, California cities and counties are recognized for reducing greenhouse gas emissions, saving energy and promoting sustainability through policies and programs.

Considerations for energy retrofit programs include education and outreach to increase demand for energy retrofits and barriers to retrofitting (for example, the upfront capital requirements, especially for low-income individuals). Other considerations for energy retrofit programs include pre- and post-retrofit energy audits, workforce training, program quality control and evaluation, and financing mechanisms.

As previously discussed one barrier to home retrofitting is the capital requirement. Possible financing mechanisms for energy retrofit programs include the following:

- Energy Efficiency and Conservation Block Grant (EECBG) – funding from the US Department of Energy which can be used for toward the goals of reducing energy use and greenhouse gas emissions, as well as creating jobs. The City of San Diego currently has \$3 million allocated to subsidize the costs for low-income home energy efficiency audits, education and retrofits.
- Weatherization Assistance Program (WAP) – Funding from the US Department of Energy to provide free weatherization services for low-income households (\$14 million allocated to the State of California). This is currently being supplemented with American Recovery and Reinvestment Act (ARRA) funding (\$185 million allocated to the State of California).
- Home Star Program - A pending DOE program providing up to \$8,000 for home retrofits.
- State Energy Programs (SEP) funds can be utilized in the form of low-interest state revolving loan funds to finance energy efficiency improvements. Southern California did not receive these funds.
- Qualified Energy Conservation Bonds – San Diego is allocated \$13.1 million, which has already been approved by the State to be used for broad spectrum lighting.
- Utility bill financing – in the form of long-term, low-interest loans paid back via utility bills. Loan repayment amounts should be offset by energy savings.
- Municipal services bill financing – monies are paid back via water or sewer bills (similar to utility bill financing).

³ The California Climate Action Network is a program of the Institute for Local Government, which is the non-profit research and education affiliate of the League of California Cities.

- State and utility rebate programs for appliances, photovoltaics and other energy efficiency items – funding is anticipated to be allocated by the CPUC to SDG&E for the Whole House Retrofit Program (for rebates and energy efficiency education).
- SDG&E has a free weatherization and appliance replacement program for certain low-income residents. Qualified residents may be eligible for further retrofits via the City's upcoming EECBG low-income retrofit program.
- Energy Efficient Mortgages – program under FHA where energy efficiency upgrades can be included in the borrower's mortgage as part of a purchase or refinance.
- 30% federal tax credit of up to \$1,500 for investment in residential energy efficient property, such as qualified water heaters, furnaces, boilers, heat pumps, central air conditioners, building insulation, windows, doors, roofs (expires December 31, 2010).
- Property Assessed Clean Energy (PACE) financing programs
 - The cost for retrofits is added to owners' property tax bills. Responsibility for the loan is attached to the building, rather than a person.
 - *The Federal Housing Finance Agency considers the liens to be a violation of its underwriting standards, and programs have been suspended.*

The City of San Diego's Energy Retrofit Program (Funded with EECBG Monies)

The City of San Diego is developing an energy retrofit program for low-income and economically disadvantaged areas. An RFP for the development and administration of the program is in the process of being issued, with anticipation for a contract award by December 31, 2010.

The plan is to design a model that will leverage other residential retrofit programs, such as the upcoming SDG&E Whole House Retrofit Program and the State Residential Ramp-Up Program (which primarily funds education and outreach). The City has allocated \$3 million in EECBG funds to subsidize the costs for low-income home energy efficiency audits, education and retrofits. The Whole House Retrofit Program includes rebates and energy efficiency education.

The administrator of the program would be a one-stop shop for dissemination of information on available resources and other programs. It is desired that the administrator of the program be responsible for the coordination of the retrofitting contract work.

Home Energy Retrofit Programs – Potential Limiting Factors for San Diego

There are some potential limiting factors for the City of San Diego when considering the requirements of energy retrofit programs in other localities – such as Portland, New York and Seattle. These limiting factors are discussed below.

Financing

The key component to effectuating a home energy retrofit program is financing. To have a comprehensive home energy retrofit program that reaches the largest number of households would be a laudable goal. However, federal and state monies for these programs are limited. The City of San Diego does not currently have access to funding for a sizable retrofit program. The Environmental Services Department (ESD) anticipates that San Diego's EECBG monies for low-income home energy retrofits will only reach 2,000 to 2,500 homes. The City does not have access to other funding, except for the planned leveraging of SDG&E programs and the Weatherization Assistance Program.

ESD has also pointed out that the return on investment for a residential building would not be as high as for a commercial building. While it is true that the sum of energy savings for all residential buildings would be significant, the net savings for a single commercial building's energy retrofit could be significantly more than retrofitting even hundreds of residential buildings. With the City's limited resources, the cost effectiveness of various program designs is one consideration in developing programs.

As with Portland, New York and Seattle, a home retrofit program that is run or financed through a local utility could provide the greatest reach into the community. However, ESD has indicated that SDG&E has not moved toward "on-bill financing" for residents. SDG&E has provided such financing for commercial customers.

Additionally, earlier this year the City was in the process of establishing a PACE financing program – the San Diego Clean Generation Program. However, in a recent national development, the Federal Housing Finance Agency has deemed liens associated with PACE programs to be in violation of its underwriting standards, and such programs have been suspended.

Issues Related to Targeting Groups for Jobs and Mandating Wages

There are issues to consider with regard to targeting certain groups, such as women- or minority-owned businesses. As outlined by City Attorney Opinion Number 97-2, local governments are prohibited from "affording preferences to any person or group of people based on race, sex, color, ethnicity, or national origin in their employment, education, or contracting programs." Proposition 209, the California Civil Rights Initiative, mandates this prohibition for governmental actions. However, if there are federal targeting requirements attached to the funding, the City must follow the requirements.

Additionally, there may be complexities with respect to local hire goals, as addressed in City Attorney Report RC-2010-15 to the Rules Committee (April 22, 2010). The report notes the risk that a court could consider an ordinance mandating local hiring goals to be unconstitutional. If only City funds are involved, small businesses can receive preferences in contracting with the City, via the Small Local Business Program.

Lastly, the issues surrounding prevailing wages for purely local programs will require further legal analysis, as these issues are highly fact sensitive. Generally, federally funded programs already require prevailing wages, as do state funded programs.

CONCLUSION

At the May 12, 2010 NR&C meeting, it was requested that the IBA explore other cities' endeavors related to home energy retrofits, as well as applicable state and federal policies. This report addresses that request, with an overview of a very complex and evolving field.

[SIGNED]

Lisa Byrne
Fiscal & Policy Analyst

[SIGNED]

APPROVED: Andrea Tevlin
Independent Budget Analyst